

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Peroxiredoxin 4 in Western blots.
Source	Monoclonal Mouse IgG ₁ Clone # 566401
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Peroxiredoxin 4 Met1-Asn271 Accession # Q13162
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide
*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.	

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunocytochemistry	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Peroxiredoxin 4 (Prx-IV; also known as PRDX4 and thioredoxin peroxidase AOE372) is a 30-32 kDa, widely expressed cytoplasmic antioxidant enzyme that belongs to the *typical 2-Cys* class of the TSA/ahpC family of peroxiredoxins. It exists as either a homodimer, or heterodimer with PRDX1. PRDX4 reportedly counteracts p53-mediated generation of ROS, and regulates NFκB via IκB-α. Human PRDX4 is 271 amino acids (aa) in length and contains an N-terminal poly-Leu region (aa 20-30) and a 159 thioredoxin domain (aa 79-237). There is one catalytic cysteine at Cys124. Over amino acids 1-271, human PRDX4 shares 89% aa identity with mouse and rat PRDX4.

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